



State of Utah

DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

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MINERALS PROGRAM
FILE COPY**

DIVISION OF
OIL, GAS & MINING

Mr. R.J. Ramsey
Barney's Canyon
P.O. Box 311
Bingham Canyon, Utah 84006-0311

Re: B.P. Minerals Cyanide Heap Leach

Dear Mr. Ramsey:

We have reviewed your proposal for blending bentonite with clay. As proposed, bentonite will be blended into the material prior to placement on the pad to achieve the desired permeability. This would provide somewhat uniform permeability at all depths of the clay layer.

When not practical to meet the condition above, the alternate proposal is placement of clay material such that the permeability changes through the depth of the liner. A clay material mixed with bentonite may be placed on top of a substandard clay layer to obtain an overall average permeability meeting the requirements.

Your proposal is acceptable provided the following conditions are met:

1. To assure the integrity of the clay liner from damage from differential settlement there must be a minimum of 6 inches of clay depth meeting the maximum allowable permeability rate, as required in the construction permit.
2. The areas of substandard clay must be defined for quality assurance.
3. The final quality assurance documentation must show the satisfactory conclusion of each occurrence.

Should you have any questions please call Lyle Stott at 538-6146.

Sincerely,

Utah Water Pollution Control Committee

Don A. Ostler, P.E.
Executive Secretary

cc: Mr. Kent Miner, Salt Lake City/County Health Dept.
Mr. Lowell Braxton, Oil, Gas and Mining

LWS:rvgn:BPBenton.ltr